

## CLAIMS:

1. A multiband microwave antenna having a substrate (10) having at least a first and a second metallization structure (11, 12), wherein the first metallization structure (11) has at least a metal area (111) forming a resonator area and the second metallization structure (12) has at least a resonant printed conductor structure (121).
2. A multiband microwave antenna as claimed in claim 1, in which the metallization structures (11, 12) are applied to mutually opposed main faces of a substantially parallelepiped substrate (10).
3. A multiband microwave antenna as claimed in claim 1, in which the substrate (10) is arranged above a metallized base plate (2) that is at a reference potential.
4. A multiband microwave antenna as claimed in claim 1, in which there is opened in the metal area (111) of the first metallization structure (11) at least a slot structure (112) that segments said metal area (111), thus enabling at least two resonant frequencies to be excited.
5. A multiband microwave antenna as claimed in claim 4, in which the at least a slot structure (112) is provided with at least a tuning slot (115, 116).
6. A multiband microwave antenna as claimed in claim 1, in which the at least a printed conductor structure (121) is provided with a tuning slot (123).
7. A multiband microwave antenna as claimed in claim 1, which is fed via a feed pin (113) that is connected to the first and/or to the second metallization structure (11, 12).
8. A multiband microwave antenna as claimed in claim 1, in which the first and/or the second metallization structure (11, 12) is connected to a shorting pin (114) fastened to the metallized base plate (2).

9. A printed circuit board, particularly for a mobile telecommunications device, having a multiband microwave antenna (1) as claimed in any one of the foregoing claims.
10. A telecommunications device having a multiband microwave antenna (1) as claimed in any one of claims 1 to 8.